

# Creighton University

Clinical Epidemiology and Validation Center

## Objectives

To recruit members of families with hereditary cancer syndromes for biomarker research.

## Program Description:

In three decades of study of hereditary cancer syndromes, Creighton University's Hereditary Cancer Institute has amassed a large resource of hereditary cancer families. We have the rapport with family members and the research experience to recruit members of these families for biomarker research. We have a large collection of biological specimens with extensive linked clinical and pedigree data. As a Clinical Epidemiology and Validation Center of the EDNR, We will use these resources in collaborative biomarker research. Our objectives are to:

- Support EDNR collaborative studies by a. recruiting members of cancer-prone families for participation b. supplying specimens and associated data from our specimen repository.
- Maintain and expand our registry of individuals at high risk of specific cancer types who are willing to participate in biomarker studies. We will enroll individuals who are carriers of hereditary cancer syndrome-associated germ-line mutations.
- Develop a serum repository with annual samples recruited from high risk individuals.
- Serve as a resource on hereditary cancer syndromes for other EDNR investigators.
- Carry out the following research projects to study of the frequency of CDKN2A, MGMT, HMTF, APC, HIC1, p14 ARF, MINT31, MINT2, TIMP3, THBS1, and MLH1 methylation in Lynch syndrome colon adenomas and early colorectal cancers, and of the value of methylation assays of stool or serum DNA for detecting early methylation-positive colon neoplasms in Lynch syndrome patients.